

REMARKS

The Office examined claims 1-20 and rejected claims 1-4, 7-14 and 17-20. With this paper, some of the claims are amended as indicated above, but the claims otherwise remain unchanged, and so claims 1-20 remain in the application.

As to the changes made to the claims, claims 1 and 11 are changed to merely make more clear that the "at least one indication" is the indication recited in the preamble.

The disclosure is also changed to correct a typographical error.

Objections to the abstract

The Office action points out a typographical error in the abstract, at paragraph one of the Office action. With this paper, the error is corrected.

Claim objections

At paragraph two of the Office action, claims 7, 9, 17 and 19 are objected to for informalities. With this paper, claims 7, 9, 17 and 19 are changed as suggested in the Office action.

Rejections under 35 USC §102

At paragraph three of the Office action, claims 1-3, 7-8, 10-13, 17-18 and 20 are rejected under 35 USC §102 as being anticipated by U.S. Pat. No. 6,163,705 to Miya. In grounding the rejection, the Office action asserts that at col. 7, ll. 41-48, Miya teaches "deciding to perform link adaptation based on the second indication of the quality of the signal."

Applicant respectfully submits that nowhere does Miya even discuss link adaptation. As explained in the

application at e.g. page 7, line 4, link adaptation is the process of changing baseband coding or the modulation level used in response to changing conditions affecting a communication channel. Miya is directed to power control, not link adaptation, and never even discusses either coding or modulation. The Office action apparently in particular relies on the statement at col. 7, line 44, including the word "speed" since in grounding the rejection, the Office action parenthetically remarks, "see col. 7, lines 41-48 where the speed is variable." Applicant respectfully submits that the "speed" referred to at the cited location has nothing to do with modulation and coding--i.e. it has nothing to do with the rate at which information is pumped through a communication channel. The speed referred to is a "variation speed" (col. 7, line 44) and the "variation" referred to is explained at col. 5, line 64 as "a variation due to a temperature characteristic, a traffic variation or the like."

Since claims 1 and 11, the only independent claims of the application, both include as a limitation deciding (*whether or not*) to perform link adaptation based on a second indication of the quality of a signal, and since Miya never teaches or even suggests link adaptation in any respect, applicant respectfully requests that all rejections under 35 USC §102 based on Miya be reconsidered and withdrawn.

Rejections under 35 USC §103

At paragraph 5 of the Office action, claims 1-4, 7-8, 10-14, 17-18 and 20 are rejected under 35 USC §103 as being unpatentable over U.S. Pat. No. 6,639,934 to Engstrom et al in view of U.S. Pat. Application Pub. No. 2003/0003920 to Sebastian.

As mentioned, claims 1 and 11 include as a limitation deciding (whether or not) to perform link adaptation based on a second indication of the quality of a signal. In grounding the rejection, the Office action concedes that Engstrom et al fails to disclose performing link adaptation based on a second indication--and indeed, as far as applicant's attorney can determine, fails to ever teach or suggest anything whatsoever to do with link adaptation--and so the Office action relies on paragraph 0064 of Sebastian for a teaching "that SIR can be used for link adaptation," and then asserts that it would have been obvious "to use the SIR target for link adaptation as taught by Sebastian in the system of Engstrom so that the transmission rate can be changed based on the quality of signal to guarantee quality of service and improve system efficiency."

Applicant respectfully submits that the combination made in the Office action is not the invention as claimed in any of the rejected claims, and in particular, it is not the invention as claimed in method claim 1 and corresponding apparatus claim 11 (the only independent claims of the application). Taking claim 1, it is for a method of deciding whether to perform link adaptation for communication from a first communication device to a second communication device, the second communication device examining a signal received from the first communication device and providing a first indication of the quality of the signal as received by the second communication device, the method including a step of providing a second indication of the quality of the signal based on the first indication of the quality of the signal, and then deciding to perform link adaptation based on the second indication of the quality of the signal. The Office action never asserts that (or shows where) the combination of references used in rejecting claims 1 and 11 teaches or

suggests providing a *second* indication of the quality of a signal based on a first indication, nor a step of making a decision as to link adaptation based on the *second* indication.

Further, applicant respectfully submits that the combination made in the Office action is improper on the ground that it is made in hindsight of the invention as claimed in the claims being rejected. To combine references, as set out in the MPEP at 706.02(j), the Examiner must establish a *prima facie* case of obviousness, which requires first, that there be "some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings," second, that "there must be a reasonable expectation of success," and third, that the combination made in the Office "teach or suggest all the claim limitations." As argued above, it is applicant's position that the Office action has not met the third requirement. In addition though, there is no showing in the Office action of "some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings." The first reference, Engstrom, is not concerned with (and never even mentions) link adaptation (but is instead directed to power control), and the rationale given in the Office action for "modifying" (really adding to) the teachings in Engstrom--that "us[ing] the SIR target for link adaptation as taught by Sebastian in the system of Engstrom so that the transmission rate can be changed based on the quality of signal ... guarantee[s] quality of service and improve[s] system efficiency"--is merely a statement that link adaptation is useful, which applicant hardly disputes.

However, the showing required is not that the element being added would be useful, but instead that the adding/modification is suggested or motivated by the prior art.

Accordingly, and since all of the claims rejected under 35 USC §103 depend from either claim 1 or claim 11, applicant respectfully requests that the all rejections under 35 USC §103 be reconsidered and withdrawn.

Conclusion


For all the foregoing reasons it is believed that all of the claims of the application are in condition for allowance and their passage to issue is earnestly solicited. Applicant's attorney urges the Examiner to call to discuss the present response if anything in the present response is unclear or unpersuasive.

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